

PATENT ABSTRACTS OF JAPAN

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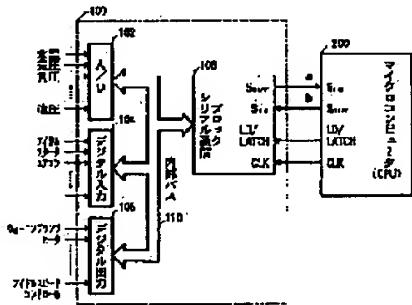
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(54) INPUT AND OUTPUT PROCESSING IC

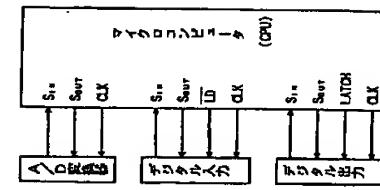
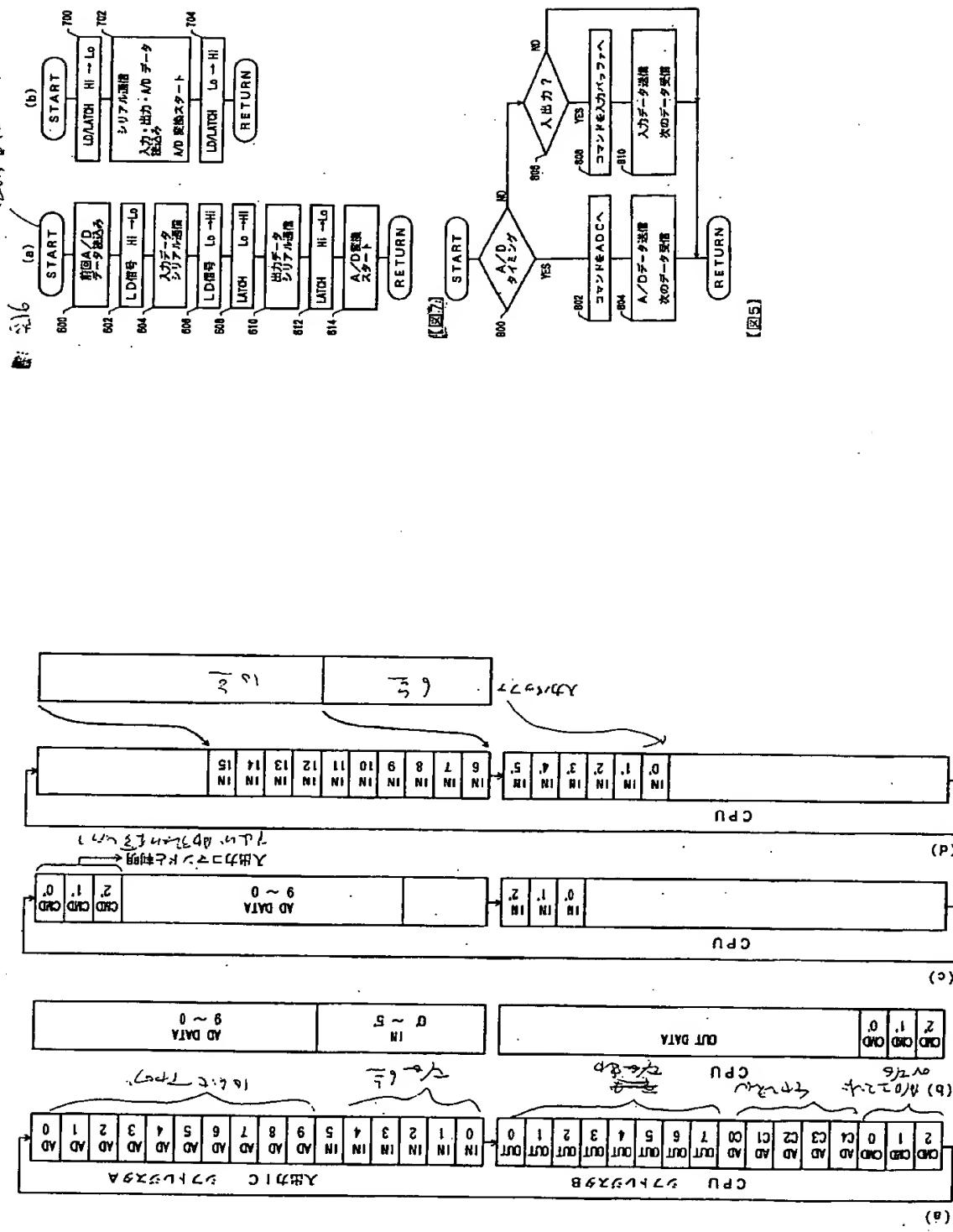
(57)Abstract:

PURPOSE: To make an input and output processing IC compact by reducing a load on a CPU.

CONSTITUTION: In an input and output processing IC 100 for a vehicle control equipment in which an A/D converter 102, digital input 104, and digital output 106 are integrated into one chip, each block is connected through an inside bus 110. The input and output processing IC 100 is connected through four lines, that is, Sin, Sout, CLK, and LD/LATCH with a microcomputer 200, and serial communication is operated with the microcomputer side by a serial communication block 108. At the time of simultaneously transferring data with the microcomputer side, a shift register is prepared on each side, and the shift destination of high-order bits is the low-order bits of the other shift register. Thus, the transmission of instruction data and the reception of input data can be simultaneously attained, and a processing time can be shortened. A command for instructing A/D conversion or input, and bits for designating a channel or output data are prepared for the head of the transmitted instruction data.



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